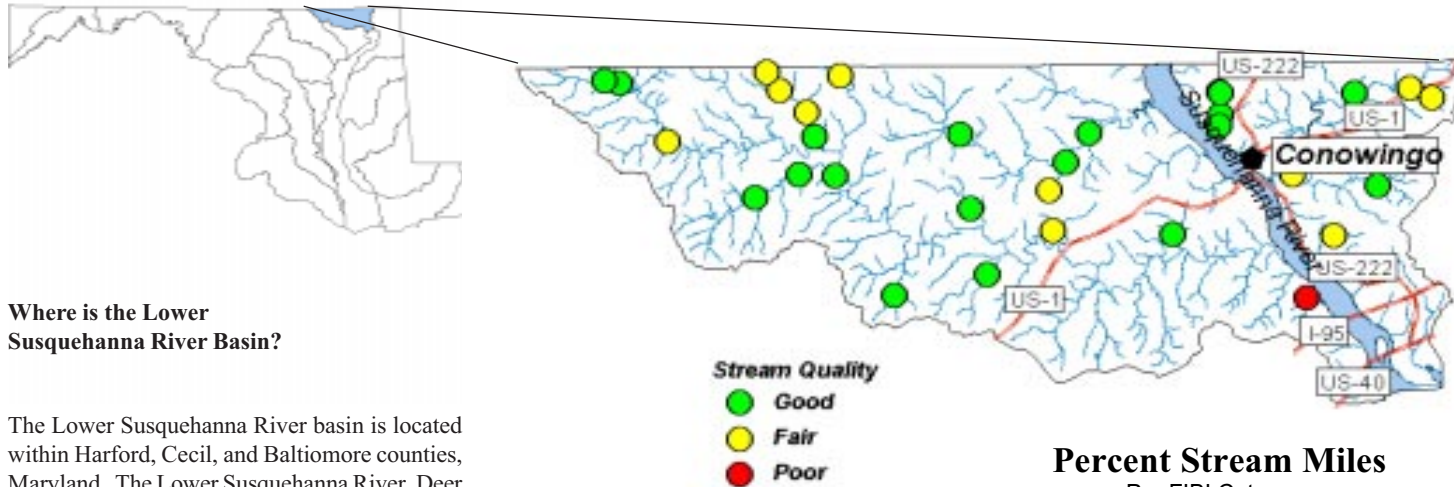




# Lower Susquehanna River Basin

## Current Status of Wadeable Streams



### Where is the Lower Susquehanna River Basin?

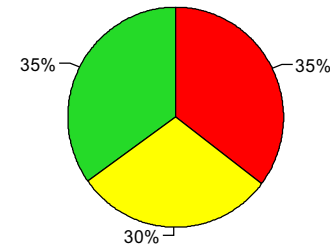
The Lower Susquehanna River basin is located within Harford, Cecil, and Baltimore counties, Maryland. The Lower Susquehanna River, Deer Creek, Octoraro Creek, and Broad Creek are all part of the network of streams that make up the basin.



Deer Creek in Harford County is representative of the streams found in the Lower Susquehanna River basin.

The Fish Index of Biotic Integrity or FIBI is a measure of stream quality based on fish communities.

### Percent Stream Miles Per FIBI Category

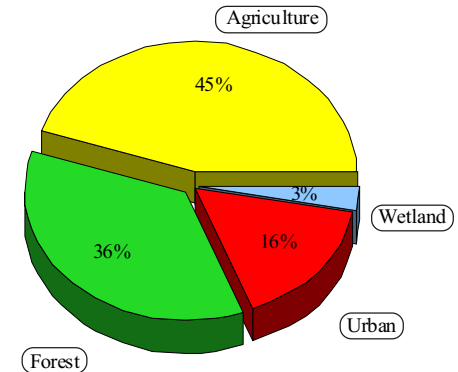


### What Lives in Our Streams? \*

Estimated Fish Abundance:	3.9 million
Number of Fish Species:	39
Number of Gamefish Species:	4
Number of Reptile and Amphibian Species:	16
Number of Freshwater Mussel Species:	1

\* Based on the Maryland Biological Stream Survey collections in wadeable streams basin-wide in 1997.

## Land Use in the Basin



The Lower Susquehanna River basin covers an area of 282 square miles and has a population density of 428 people per square mile. Land uses in the basin are primarily agricultural and forest.



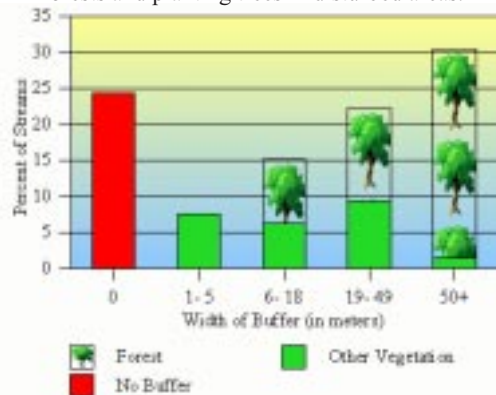
### Water Quality

- Oxygen** - 100% of the oxygen levels in the basin are above the state water quality standard of 5 mg/L.
- Nitrate** - 94% of the streams had nitrate levels (>1 mg/L) that may affect aquatic life. The main source of nitrates in small streams are fertilizers and acid rain.
- Buffering Capacity** - 100% of the streams are well-buffered against acid rain.

Good Fair Poor

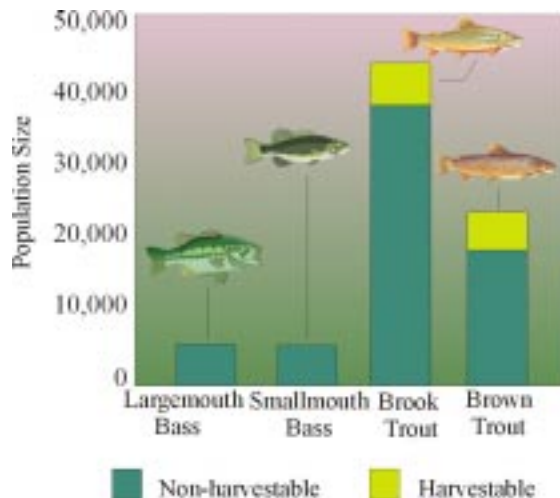
## Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Susquehanna River basin are in fair to poor condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



## Gamefish

Four species of gamefish were collected in the basin. The majority of the individuals collected were not of a harvestable size. It appears that the tributary streams of the Susquehanna basin serve as a nursery for gamefish species.



## Did You Know???



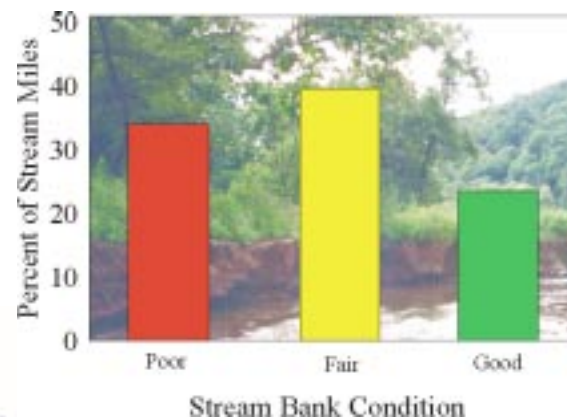
- Although explorers accompanying John Smith first discovered Deer Creek in 1608, the dangers of fierce Indian warfare and difficult travel kept the Susquehanna area a remote wilderness until the 1700's.
- A railroad route was planned to run from Bel Air to the Susquehanna River but was never completed. Sections of the abandoned bed are still detectable along the north bank of Deer Creek.



*The logperch, highly rare in Maryland, is found in the Lower Susquehanna River basin.*

## Stream Bank Stability

Eroded, unstable stream banks reduce habitat quality and contribute to water quality problems in downstream areas. On average, stream banks in the basin are in fair condition. Since streams in the basin flow into the Chesapeake Bay, this bank instability causes an increase in downstream transport of nutrients and suspended sediments to the Bay.



## Recreation

Susquehanna State Park and Palmer State Park, along with other wilderness areas in the basin, provide many recreational opportunities for friends and family. Popular activities include hiking, camping, fishing, swimming, picnicking, and nature studies.



*A young boy tries his luck at fishing in Deer Creek.*

## Community Involvement

Want to help? These community groups can show you how!

Alliance for the Chesapeake Bay  
6600 York Road, Suite 100  
Baltimore, MD 21212  
Kathleen Millan (410) 377-6270

Deer Creek Watershed Assoc.  
P.O. Box 111  
Darlington, MD 21034  
Marchant Hall (410) 836-3716



For more detailed information on streams in the Lower Susquehanna River basin and elsewhere in Maryland, contact Ann Smith of DNR/MANTA at (410) 260-8610 or email [asmith@dnr.state.md.us](mailto:asmith@dnr.state.md.us), or check out the DNR web site at [www.dnr.state.md.us/Bays/waterqual/mbss/mbss.html](http://www.dnr.state.md.us/Bays/waterqual/mbss/mbss.html).